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<b>TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US) CONCERNING A SUBMISSION UNDER 35 U.S.C. 371</b>		ATTORNEY'S DOCKET NUMBER <b>BRW-002US</b>
INTERNATIONAL APPLICATION NO. <b>PCT/NO03/00429</b>	INTERNATIONAL FILING DATE <b>19 December 2003</b>	U.S. APPLICATION NO. (if known, see 37 CFR 1.5) <b>10/540896</b>
		PRIORITY DATE CLAIMED <b>27 December 2002</b>
<b>TITLE OF INVENTION</b> <b>ETCHING of AlGaInAsSb</b>		
<b>APPLICANT(S) FOR DO/EO/US</b> <b>Renato BUGGE et al.</b>		
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:		
<p>1. <input type="checkbox"/> This is a <b>FIRST</b> submission of items concerning a submission under 35 U.S.C. 371.</p> <p>2. <input checked="" type="checkbox"/> This is a <b>SECOND</b> or <b>SUBSEQUENT</b> submission of items concerning a submission under 35 U.S.C. 371.</p> <p>3. <input type="checkbox"/> This is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items (5), (6), (9) and (21) indicated below.</p> <p>4. <input type="checkbox"/> The US has been elected (Article 31).</p> <p>5. <input type="checkbox"/> A copy of the International Application as filed (35 U.S.C. 371 (c)(2))        a. <input type="checkbox"/> is attached hereto (required only if not communicated by the International Bureau).        b. <input type="checkbox"/> has been communicated by the International Bureau.        c. <input type="checkbox"/> is not required, as the application was filed in the United States Receiving Office (RO/US).</p> <p>6. <input type="checkbox"/> An English language translation of the International Application as filed (35 U.S.C. 371(c)(2)).        a. <input type="checkbox"/> is attached hereto.        b. <input type="checkbox"/> has been previously submitted under 35 U.S.C. 154(d)(4).</p> <p>7. <input type="checkbox"/> Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))        a. <input type="checkbox"/> are attached hereto (required only if not communicated by the International Bureau).        b. <input type="checkbox"/> have been communicated by the International Bureau.        c. <input type="checkbox"/> have not been made; however, the time limit for making such amendments has NOT expired.        d. <input type="checkbox"/> have not been made and will not be made.</p> <p>8. <input type="checkbox"/> An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).</p> <p>9. <input checked="" type="checkbox"/> An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).</p> <p>10. <input type="checkbox"/> An English language translation of the annexes of the International Preliminary Examination Report under PCT Article 36 (35 U.S.C. 371(c)(5)).</p>		
<b>Items 11 to 20 below concern document(s) or information included:</b>		
<p>11. <input type="checkbox"/> An Information Disclosure Statement under 37 CFR 1.97 and 1.98.</p> <p>12. <input type="checkbox"/> An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.</p> <p>13. <input type="checkbox"/> A preliminary amendment.</p> <p>14. <input type="checkbox"/> An Application Data Sheet under 37 CFR 1.76.</p> <p>15. <input type="checkbox"/> A substitute specification.</p> <p>16. <input type="checkbox"/> A power of attorney and/or change of address letter.</p> <p>17. <input type="checkbox"/> A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821 – 1.825.</p> <p>18. <input type="checkbox"/> A second copy of the published International Application under 35 U.S.C. 154(d)(4).</p> <p>19. <input type="checkbox"/> A second copy of the English language translation of the international application under 35 U.S.C. 154(d)(4).</p>		

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U. S. APPLICATION NO. (if known, see 37 CFR 1.5) 10/540896	INTERNATIONAL APPLICATION NO. PCT/NO03/00429	ATTORNEY'S DOCKET NUMBER BRW-002US																																																																																																																						
<p>20. <input checked="" type="checkbox"/> Other items or information: Response to Notification of Missing Requirements Supplemental Application Data Sheet Copy of Notification of Missing Requirements Certificate of Express Mailing Return Receipt Postcard</p>																																																																																																																								
<p>The following fees have been submitted</p> <table border="1"> <tr> <td>21. <input type="checkbox"/> Basic national fee (37 CFR 1.492(a))</td> <td>\$300</td> <td>CALCULATIONS</td> <td>PTO USEONLY</td> </tr> <tr> <td>22. <input type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)</td> <td>\$0</td> <td>\$</td> <td></td> </tr> <tr> <td>All other situations</td> <td>\$200</td> <td></td> <td></td> </tr> <tr> <td>23. <input type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)</td> <td>\$0</td> <td>\$</td> <td></td> </tr> <tr> <td>Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority</td> <td>\$100</td> <td></td> <td></td> </tr> <tr> <td>International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB</td> <td>\$400</td> <td></td> <td></td> </tr> <tr> <td>All other situations</td> <td>\$500</td> <td></td> <td></td> </tr> <tr> <td colspan="2"><b>TOTAL OF 21, 22 and 23 =</b></td> <td>\$ 0.00</td> <td></td> </tr> <tr> <td colspan="3"> <input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.         </td> <td></td> </tr> <tr> <td>Total Sheets</td> <td>Extra Sheets</td> <td>Number of each additional 50 or fraction thereof (round up to a whole number)</td> <td>RATE</td> </tr> <tr> <td>- 100 =</td> <td>/50 =</td> <td></td> <td>x \$250.00</td> </tr> <tr> <td colspan="3">Surcharge of \$130 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).</td> <td>\$</td> </tr> <tr> <td colspan="2">CLAIMS</td> <td>NUMBER FILED</td> <td>NUMBER EXTRA</td> <td>RATE</td> </tr> <tr> <td colspan="2">Total claims</td> <td>- =</td> <td></td> <td>x</td> </tr> <tr> <td colspan="2">Independent claims</td> <td>- =</td> <td></td> <td>x</td> </tr> <tr> <td colspan="3">MULTIPLE DEPENDENT CLAIM(S) (if applicable)</td> <td>+ 360.00</td> <td></td> </tr> <tr> <td colspan="4"><b>TOTAL OF ABOVE CALCULATIONS =</b></td> <td>\$</td> </tr> <tr> <td colspan="4"> <input checked="" type="checkbox"/> Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by ½.         </td> <td></td> </tr> <tr> <td colspan="4"><b>SUBTOTAL =</b></td> <td>\$</td> </tr> <tr> <td colspan="4">Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).</td> <td>\$</td> </tr> <tr> <td colspan="4"><b>TOTAL NATIONAL FEE =</b></td> <td>\$</td> </tr> <tr> <td colspan="4">Fee for recording the enclosed assignment (37 CFR 1.21(h)). The assignment must be accompanied by an appropriate cover sheet (37 CFR 3.28, 3.31). \$40.00 per property</td> <td>\$</td> </tr> <tr> <td colspan="4"></td> <td>\$</td> </tr> <tr> <td colspan="4"><b>TOTAL FEES ENCLOSED =</b></td> <td>\$ 0.00</td> </tr> <tr> <td colspan="4"></td> <td>Amount to be refunded: \$</td> </tr> <tr> <td colspan="4"></td> <td>Amount to be charged \$</td> </tr> </table>			21. <input type="checkbox"/> Basic national fee (37 CFR 1.492(a))	\$300	CALCULATIONS	PTO USEONLY	22. <input type="checkbox"/> Examination fee (37 CFR 1.492(c)) If the written opinion prepared by ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)	\$0	\$		All other situations	\$200			23. <input type="checkbox"/> Search fee (37 CFR 1.492(b)) If the written opinion of the ISA/US or the international preliminary examination report prepared by IPEA/US indicates all claims satisfy provisions of PCT Article 33(1)-(4)	\$0	\$		Search fee (37 CFR 1.445(a)(2)) has been paid on the international application to the USPTO as an International Searching Authority	\$100			International Search Report prepared by an ISA other than the US and provided to the Office or previously communicated to the US by the IB	\$400			All other situations	\$500			<b>TOTAL OF 21, 22 and 23 =</b>		\$ 0.00		<input type="checkbox"/> Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). 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a.  A check in the amount of \$ \_\_\_\_\_ to cover the above fees is enclosed.

b.  Please charge my Deposit Account No. \_\_\_\_\_ in the amount of \$ \_\_\_\_\_ to cover the above fees.  
A duplicate copy of this sheet is enclosed.

c.  The Commissioner is hereby authorized to charge any additional fees which may be required, or credit any overpayment to Deposit Account No. 12-0080. A duplicate copy of this sheet is enclosed.

d.  Fees are to be charged to a credit card. **WARNING:** Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038

**NOTE:** Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed an granted to restore the International Application to pending status.

SEND ALL CORRESPONDENCE TO:

Anthony A. Laurentano  
LAHIVE & COCKFIELD, LLP  
28 State Street  
Boston, Massachusetts 02109  
(617) 227-7400  
**May 16, 2006**

CUSTOMER NUMBER: 00959

SIGNATURE



Anthony A. Laurentano  
NAME

38,220  
REGISTRATION NUMBER

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

In re Patent Application of:  
Renato Bugge *et al.*

Application No.: 10/540896

Confirmation No.: 1816

Filing Date of  
International Application: 19 December 2003

Art Unit: N/A

For: ETCHING of AlGaInAsSb

Examiner: Not Yet Assigned

**RESPONSE TO NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C.**  
**371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE**

MS PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

In response to the Notification of Missing Requirements Under 35 U.S.C. 371, mailed March 16, 2006, Applicants respectfully submit a Declaration, Petition and Power of Attorney, as well as a Supplemental Application Data Sheet, and a copy of the Notification of Missing Requirements.

Dated: May 16, 2006

Respectfully submitted,

By   
Anthony A. Laurentano  
Registration No. 38,220  
LAHIVE & COCKFIELD, LLP  
28 State Street  
Boston, Massachusetts 02109  
(617) 227-7400  
(617) 742-4214 (Fax)  
Attorney/Agent For Applicants

COPY



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
 United States Patent and Trademark Office  
 Address: COMMISSIONER FOR PATENTS  
 P.O. Box 1450  
 Alexandria, Virginia 22313-1450  
 www.uspto.gov

U.S. APPLICATION NUMBER NO.	FIRST NAMED APPLICANT	ATTY. DOCKET NO.
10/540,896	Renato Bugge	BRW-002US

INTERNATIONAL APPLICATION NO.

PCT/NO03/00429

I.A. FILING DATE	PRIORITY DATE
12/19/2003	12/27/2002

959  
 LAHIVE & COCKFIELD  
 28 STATE STREET  
 BOSTON, MA 02109

ENTERED

DOCKETED  
*May 16, 2006 missing reg.*  
*OCT 16, 2006 PAP W/5 EXT.*

CONFIRMATION NO. 1816

371 FORMALITIES LETTER



\*OC000000018280093\*

Date Mailed: 03/16/2006

**NOTIFICATION OF MISSING REQUIREMENTS UNDER 35 U.S.C. 371 IN THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/EO/US)**

The following items have been submitted by the applicant or the IB to the United States Patent and Trademark Office as a Designated / Elected Office (37 CFR 1.495).

- Indication of Small Entity Status
- Copy of the International Application filed on 06/27/2005
- Copy of the International Search Report filed on 06/27/2005
- Copy of IPE Report filed on 06/27/2005
- Copy of Annexes to the IPER filed on 06/27/2005
- Preliminary Amendments filed on 06/27/2005
- Information Disclosure Statements filed on 06/27/2005
- U.S. Basic National Fees filed on 06/27/2005
- Priority Documents filed on 06/27/2005
- Specification filed on 06/27/2005
- Claims filed on 06/27/2005
- Abstracts filed on 06/27/2005
- Drawings filed on 06/27/2005

The following items **MUST** be furnished within the period set forth below in order to complete the requirements for acceptance under 35 U.S.C. 371:

- Oath or declaration of the inventors, in compliance with 37 CFR 1.497(a) and (b), identifying the application by the International application number and international filing date.

**ALL OF THE ITEMS SET FORTH ABOVE MUST BE SUBMITTED WITHIN TWO (2) MONTHS FROM THE DATE OF THIS NOTICE OR BY 32 MONTHS FROM THE PRIORITY DATE FOR THE APPLICATION, WHICHEVER IS LATER. FAILURE TO PROPERLY RESPOND WILL RESULT IN ABANDONMENT.**

The time period set above may be extended by filing a petition and fee for extension of time under the provisions

of 37 CFR 1.136(a).

Applicant is reminded that any communications to the United States Patent and Trademark Office must be mailed to the address given in the heading and include the U.S. application no. shown above (37 CFR 1.5)

*A copy of this notice **MUST** be returned with the response.*

TAMALA D HOLLAND

---

Telephone: (703) 308-9140 EXT 209

**PART 1 - ATTORNEY/APPLICANT COPY**

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U.S. APPLICATION NUMBER NO.	INTERNATIONAL APPLICATION NO.	ATTY. DOCKET NO.
10/540,896	PCT/NO03/00429	BRW-002US

FORM PCT/DO/EO/905 (371 Formalities Notice)

## **Certificate of Express Mailing Under 37 CFR 1.10**

I hereby certify that this correspondence is being deposited with the United States Postal Service as Express Mail, Airbill No. EV 682 326 453 US in an envelope addressed to:

MS PCT  
Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

on May 16, 2006  
Date

  
Signature

Anthony A. Laurentano

Typed or printed name of person signing Certificate

38,220  
Registration Number, if applicable

(617) 227-7400  
Telephone Number

Note: Each paper must have its own certificate of mailing, or this certificate must identify each submitted paper.

Transmittal Letter to the United States Designated-Elected Office (3 pages)

Response To Notification Of Missing Requirements Under 35 U.S.C. 371  
In The United States Designated/elected Office (1 page)

Oath or declaration of the inventor(s) (4 pages)

Supplemental Application Data Sheet (3 pages)

Copy of Notification of Missing Requirements (2 pages)

Return Receipt Postcard